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*Self-Help Advice*

# STORM SURGES

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the Meteorological Service of Canada will issue statements, warnings, and/or interviews through various media including Newswire Services, Environment Canada's Weatheradio and Automated Telephone Answering Devices.

If a significant storm surge is forecast, Environment Canada will issue, in their marine and public synopses, a statement informing the public of the potential for high surf, high water levels, and coastal flooding. These are issued up to 48 hours in advance of any anticipated storm surge.

If forecasters estimate a storm surge to be large in scale, they will also issue a public weather warning. The impacts of storm surges can vary from sea to sea, making it difficult to provide warnings that are specific to each local area. For example, a 60 centimetre rise in sea-levels may not be significant in one area, but depending on tide heights, may be high enough to cause significant damage in other areas.

Environment Canada and Emergency Measures Organizations collaborate to ensure the pertinent messages about storm surges are reaching the communities that can or will potentially be affected by the storm.

## **BE PREPARED**

Storm surges can happen quickly without allowing much time for preparation. Residents, particularly those living in low lying areas near the coastline, should take precautions and measures to be prepared for storm surges. Your best chance of reducing damage from a storm surge is to plan ahead.



- **How well do you know your property?** Find out if your home is subject to storm surge damage. Have you or your neighbours experienced coastal flooding in the past? If so make sure you carefully investigate your house and land for any potential dangers of flooding or other risks. It is important to know how to turn off the gas and electricity in your house, as you may be instructed by local authorities to shut these off.



- **Do you know where all your important documents are?** Make an inventory of property items and personal items. This can be done by making a list of the valuables things you own and supplying a video or photographs of them for insurance companies. Ensure that these and other important documents (i.e., birth certificates, insurance policies, contract deeds, passports, social insurance numbers, immunization records, marriage and death certificates and other legal documents) are stored safely in a waterproof area or box. Many people have a tendency to store these and other valuables in the basement. If you live in an area that is subject to flooding, make sure these are stored at a higher level, protected from flood damage.
- **Where will your family be?** Create a family plan in case of any emergency and ensure all family members know it. Contact your local municipal or provincial Emergency Measures Organization for more information about how to plan as a family for an emergency. It is important that you also know about the emergency plan for nearby schools, offices, daycare and other places where family

members work or play. In an emergency, it will be important to know where your family is and to be able to reach them.

- **Do you have everything you need?** Prepare an emergency supply kit. Along with food, water, and medications and medical supplies include a change of clothes (with rainwear), a battery powered radio and flashlight with extra batteries, personal identification for all family members and copies of any important personal and family documents. Sandbags are a valuable tool to prevent water from entering your home.

## WHEN A STORM SURGE IS FORECAST

Storm surges can happen at any time. If you live in an area that is susceptible to storm surge and coastal flooding, listening regularly to Marine or Public forecasts can be helpful since they will predict the water levels in certain areas to be higher than normal. In the event that a storm surge does occur, these are the measures you should follow to safeguard life and property.

- Stay inside where you are protected from the water.
- If you are not all together, make sure to keep in frequent touch with family members.
- Make sure the basement windows are closed.
- Fuel your car; if evacuation becomes imminent, it will be hard to stop for gas.







- Check supplies including medications, radio and flashlight batteries.
- Monitor the storm's progress and listen for further warnings or instructions from local officials.
- Floodwaters can be dangerous to drive through. It is best to listen carefully to rescue officials who will be coordinating evacuation plans before driving any place.
- Stay indoors on the downwind side of the house, away from windows.
- Be aware of potential risks, such as hypothermia from cold waters, or drowning from running waters. Your local chapter of St. John Ambulance or Red Cross can provide more information on how to prepare for or prevent these consequences.
- If you are concerned, have any questions, or need to know more about evacuation procedures, contact your local Emergency Measures Organization, police or fire department.

In the event of an evacuation order, here are some useful tips to remember:

- Review and practice your home evacuation plans with family members.
- Take small valuables and papers but travel light.



- Establish an out of area contact such as a relative in a nearby city where your family can meet after it evacuates.
- Make sure you take your emergency preparedness kit with you.
- If you are evacuating your home, leave a note at your home stating your whereabouts and register at any local registration and inquiry centre so you can be contacted when it is safe to return home.

## **WHAT IS MY COMMUNITY DOING TO HELP PREVENT DAMAGE?**

As storm surges become a greater concern in Canada's communities, municipalities have realized the need to take a greater responsibility to provide protection to their residents. In the event of a storm surge, vital community resources could be damaged, wiped out, or become inaccessible. Planning for potential coastal flooding is the best way to minimize the damage that communities can face.

City planners and municipal leaders will need to keep some of the following things in mind:

- Will emergency response staff be able to reach and effectively assist all areas of the community? Which areas are the most vulnerable to storm surge damage?



- Will residents still be able to access hospitals? Are there alternative hospitals or health care centers in nearby areas, out of the hazard area, that can help deal with large amounts of people?
- Will residents still be able to access clean water? Are there back-ups to the water supply available in case of damage to others?
- Is there a potential for sewage overflow?
- What natural resources could be affected by a storm surge? Will we lose valuable agricultural land or forests?
- What will happen to coastal infrastructure, like wharves, water access points, and boardwalks?
- Are residents educated on what to do in case of a storm surge?
- Are there cultural resources in danger of being damaged or lost during a storm surge?
- Prioritize areas to be rebuilt or reinforced. Realize that municipalities do not have to wait for damage to occur before rebuilding. Any vital buildings which have a high risk of sustaining damage in the event of a storm surge could be reinforced before storm surge events occur.



- Decide whether funds are going to be committed to rebuild damaged areas and infrastructure. It is also vital to decide if encouraging damaged infrastructure to be rebuilt in other areas (i.e. those that are less likely to be affected by storm surges) is the most appropriate route of action.

Studies are being conducted to help high risk municipalities better prepare for storm surge events.

Extreme Weather events can have devastating impacts on Canadians, which can be minimized if precautions are taken in advance, during, and after an emergency. The most important advice is to be prepared for storm surge events and to listen for up to date weather forecasts and weather conditions.





For more self-help advice on emergency preparedness, contact:

**OFFICE OF CRITICAL  
INFRASTRUCTURE PROTECTION  
AND EMERGENCY PREPAREDNESS**

Communications

122 Bank St., 2nd Floor

Ottawa, ON K1A 0W6

Phone: (613) 991-7035 1-800-830-3118

Fax: (613) 998-9589

E-mail: [communications@ocipep.gc.ca](mailto:communications@ocipep.gc.ca)

Internet: <http://www.ocipep.gc.ca>

For more information about severe weather or weather in general, contact:

**ENQUIRY CENTRE  
ENVIRONMENT CANADA**

Ottawa, Ontario, Canada

K1A 0H3

Phone: 1-800-668-6767 or (819) 997-2800

Fax: (819) 953-0966

E-mail: [enviroinfo@ec.gc.ca](mailto:enviroinfo@ec.gc.ca)

For information about the weather

Internet: <http://www.msc-smc.ec.gc.ca/>

**WEATHER MENU**

A menu of recorded specialized weather forecasts

1-900-565-5000 (English)

1-900-545-4000 (French)

There is a fee per minute for this service.

**WEATHER ONE-ON-ONE**

**To consult an Environment Canada weather expert**

1-900-565-5555 (English)

1-900-565-4455 (French)

There is also a per-minute fee for this service (\$2.99 a minute at press time).

# PROVINCIAL/TERRITORIAL EMERGENCY MEASURES ORGANIZATIONS

## *British Columbia*

Provincial Emergency Program (PEP)

Phone: (250) 952-4913

Fax: (250) 952-4888

## *Yukon*

Emergency Measures Organization

Phone: (867) 667-5220

Fax: (867) 393-6266

## *Alberta*

Disaster Services Branch

Phone: (780) 422-9000

Fax: (780) 422-1549

Toll free in Alberta, dial 310-0000-780-427-9000

## *Northwest Territories*

Emergency Measures Organization

Phone: (867) 920-6133

Fax: (867) 873-8193

## *Saskatchewan*

Saskatchewan Municipal Affairs and Housing  
Protection and Emergency Services

Phone: (306) 787-9563

Fax: (306) 787-1694

## *Manitoba*

Manitoba Emergency Management  
Organization (MEMO)

Phone: (204) 945-4772

Fax: (204) 945-4620

## *Ontario*

Emergency Measures Ontario

Phone: (416) 314-3723

Fax: (416) 314-3758



## *Quebec*

Territorial Directorate

Phone: (418) 646-7950

Fax: (418) 646-5427

Or one of the regional directorates:

Montréal (514) 873-1300

Montréal et Estrie (514) 873-1324

Laval, Lanaudière et  
Laurentides (514) 873-1300

Outaouais, Abitibi – Témiscamingue et  
Nord du Québec (819) 772-3737

Bas-Saint-Laurent, Gaspésie et  
Îles-de la-Madeleine (418) 727-3589

Saguenay – Lac-Saint-Jean et  
Côte-Nord (418) 695-7872

Capitale-Nationale, Chaudière-Appalaches et  
Nunavik (418) 643-3244

Mauricie et Centre-du-  
Québec (819) 371-6703

Or one of the regional offices:

Sherbrooke (819) 820-3631

Saint-Jérôme (450) 569-7565

Joliette (450) 757-7996

Rouyn-Noranda (819) 763-3636

Gaspé (418) 360-8097

Baie-Comeau (418) 295-4903

Baie-Saint-Paul (418) 435-2530

### *New Brunswick*

New Brunswick Emergency Measures  
Organization

Phone: (506) 453-2133

Fax: (506) 453-5513

### *Nova Scotia*

Nova Scotia Emergency Measures Organization

Phone: (902) 424-5620

Fax: (902) 424-5376

### *Prince Edward Island*

Emergency Measures Organization

Phone: (902) 888-8050

Fax: (902) 888-8054

24/7 Inquiry Line: (902) 892-9365

### *Newfoundland and Labrador*

Emergency Measures Division

Phone: (709) 729-3703

Fax: (709) 729-3857

### *Nunavut*

Nunavut Emergency Management

Phone: (867) 979-6262

Fax: (867) 979-4221

For more information on emergency  
preparedness, please contact your  
provincial/territorial emergency measures  
organization.







SAFE GUARD is a national information program based on partnerships and aimed at increasing public awareness of emergency preparedness in Canada.

The SAFE GUARD program brings together government, private organizations and voluntary agencies that are part of the emergency preparedness, response, recovery and mitigation community.

The triangle depicted in the program logo is the international symbol of emergency preparedness. The jagged line evokes the maple leaf, Canada's internationally recognized symbol. The amber yellow colour is a sign of caution and warning.

**SAFE GUARD** is an Office of Critical Infrastructure Protection and Emergency Preparedness program.







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